

REMARKS

The Final Office Action dated September 22, 2010, has been received and carefully noted. The above amendments and the following remarks are being submitted as a full and complete response thereto. Applicants hereby thank the Examiner for the courtesies extended by the Examiner to the Applicants' representative during the Examiner Interview conducted by telephone on November 9, 2010. Claims 1, 3-6, 8-11 and 13 are pending. By this Amendment, Claims 1 and 13 are amended for clarification. Support for the amendments to the claims can be found on at least page 10, lines 20-27, and Figures 2 and 3 of the application as originally filed. Applicants respectfully submit that no new matter is presented herein.

Entry of Response Proper

Entry of this Amendment is proper under 37 C.F.R. §1.116 since the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issues requiring further search and/or consideration on the part of the Examiner as the Amendment merely clarifies the claimed feature of the gas mixing chamber; (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The Amendment is necessary and was not earlier presented because it is made in response to objections raised in the Final Rejection, as discussed during the Interview. Entry of the Amendment is thus respectfully requested.

Rejections Under 35 U.S.C. §§ 102/103

The Final Office Action of September 22, 2010 rejected Claims 1 and 3-4 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Number 6,155,200 to Yasuhiro Horiike et al. (Horiike); rejected Claims 5-6 and 8-10 under 35 U.S.C. §103(a) as being unpatentable over Horiike; rejected Claim 11 under 35 U.S.C. §103(a) as being unpatentable over Horiike in view of U.S. Patent Number 5,884,009 to Wataru Okase (Okase); and rejected Claim 13 under 35 U.S.C. §103(a) as being unpatentable over Horiike in view of U.S. Patent Number 6,817,377 to Paul Reimer et al. (Reimer).

Applicants traverse the rejections for at least the following reason(s).

The Office Action asserts that the area or volume above the electrode 16 within the shower head 18 in Figure 2 of Horiike corresponds to the gas-mixing chamber of Claim 1 and Claim 13. As discussed during the November 9th Interview, the Applicants respectfully submit that Claims 1 and 13 recite a film-forming apparatus that includes, among other features, a gas-mixing chamber for admixing a raw gas and a reactive gas, wherein the gas mixture initially prepared in the gas-mixing chamber is introduced into a film-forming chamber through a shower head for forming a film on a substrate. Horiike discloses a process gas supply system 9 for supplying the process gas through a gas supply pipe 8 to the shower head 18. The gas supply system 9 supplies the process gas formed of the reaction gas and the diluent gas through supply pipe 8 to a gas introducing portion 20 which leads directly into the volume area of the shower head 18 that is above the electrode 16. See Figure 2 and col. 3, lines 45-52, of Horiike. The gas mixture in Horiike is initially prepared in the gas supply system 9 and the mixture piped through the gas supply pipe 8 to the gas introducing portion 20 for delivery to the

shower head 18. Thus, the reaction gas and the diluents gas are already admixed prior to being received into the shower head 18, i.e., the volume area above the electrode 16. Accordingly, the Applicants respectfully submit that the Office Action distorts the plain meaning of the terms used in Claims 1 and 13, as those terms would be understood by one of ordinary skill the art, and as those terms are supported throughout the disclosure of the present invention. The volume area in the shower head 18 above the electrode 16 in Figure 2 of Horiike does not correspond to the gas-mixing chamber recited in Claims 1 and 13. As such, Horiike does not disclose, teach or suggest a gas mixture supply port that is defined only by opposing surfaces of the gas-mixing and film-forming chambers, wherein the gas mixture supply port is so constructed and arranged that the gas mixture to be supplied from the gas-mixing chamber flows in direct contact with, and only from outside a circumferential outer perimeter of, the upper surface of the shower head and the gas-injection holes toward a central portion along the upper surface of the shower head, as also recited by Claims 1 and 13.

Applicants respectfully submit that modifying Horrike to include the Okase gas-ring and/or Reimer's load-lock and conveyer chambers would not cure or otherwise address the above-described deficiencies of Horiike.

As such, the Applicants submit that Claims 1 and 13 are allowable over Horiike, Okase and Reimer, alone or in any combination thereof.

Claims 3-6 and 8-11 depend from Claim 1. It is respectfully submitted that these dependent claims be deemed allowable for at least the same reasons Claim 1 is allowable, as well as for the additional subject matter recited therein.

Withdrawal of the rejections is respectfully requested.

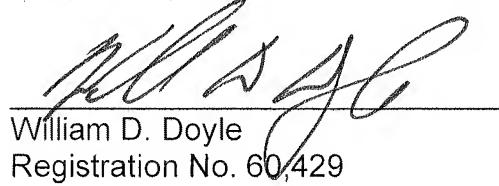
Conclusion

In view of the above, Applicants respectfully request withdrawal of the outstanding rejections, allowance of Claims 1, 3-6, 8-11 and 13, and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing Attorney Dkt. No. 026390-00009.**

Respectfully submitted,



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